4. (amended) Method according to claim 1, characterized in that the injection pressure of the fuel feed device (13) is higher than 300 bar, preferably between 1000 and 3000 bar.

5. (amended) Method according to claim 1, characterized in that the injection pressure is controlled such that is varies during the injection of the fuel or the fuel mixture into the cylinder (2).

6. (amended) Method according to claim 1, characterized in that the fuel or the fuel mixture is injected such that the fuel or the fuel mixture, at the start of the injection, is injected at the maximum pressure generated during the whole of the injection.

7. (amended) Method according to claim 1, characterized in that, as a result of the motion and design (29) of the piston (3), kinetic energy is supplied, during the expansion phase, to the large-scale global mixing process.

8. (amended) Method according to claim 1, characterized in that the fuel or the fuel mixture is injected through nozzles of round, elliptical or other suitable shape approx. 0.05-0.40 mm, preferably approx. 0.1-0.25 mm, in size.

9. (amended) Method according to claim 1, characterized in that the injection of the fuel or the fuel mixture into the cylinder (2) is begun, when applied to a combustion engine with crankshaft, at a crankshaft angle of approx. 20° before to approx. 20° after the upper dead centre position.

10. (amended) Method according to claim 1, characterized in that the mixing is carried out locally, since fuel or the fuel mixture and the cylinder gas are mixed in regions upstream of the regions in the spray where combustion takes place and since the injection continues after ignition has been realized.

12. (amended) Method according to claim 1, characterized in that the mixing is carried out globally since essentially the entire quantity of fuel corresponding to one combustion cycle is injected and mixed in the cylinder (2) before ignition and combustion are realized.

13. (amended) Method according to claim 1, characterized in that the gas motion is formed by the gas present in the cylinder (2) being forced out through a gap (21) between the periphery of a piston top (8) and one end of the cylinder (2), when the piston (3) is in the upper dead centre position.

14. (amended) Method according to claim 1, characterized in that a swirl motion is generated in the cylinder (2).

15. (amended) Method according to claim 1, characterized in that further kinetic energy to the mixture is supplied through a post-injection.